

ABSTRACT OF THE DISCLOSURE

5 MICRO-MACHINED SENSOR WITH INSULATOR PROTECTION FOR THE CONNECTIONS

The invention relates to sensors of physical quantities such as pressure or acceleration sensors and, more specifically, to the mounting of the active part of the sensor on a base (30) bearing connection pins (32).

10 According to the invention, an active part of the sensor is prepared. This active part is formed, for example, by micro-machined silicon wafers (10, 12) bearing electronic elements, electrical conductors and connection pads (22). A base (30) is thus prepared, provided with pins (32), and the pads (22) are electrically connected to the pin ends by conductive
15 elements (wires 40). Then the wafer and the pin ends are plunged into an electrolytic bath so as to make an electrolytic deposit of conductive metal (42) on the pin ends, the pads and the conductive elements that connect them. Finally, this metal is oxidized or nitrized to constitute an insulating coat
20 connect them.

Application to sensors of pressure, stresses, acceleration etc, designed to work in harsh environments.

Figure 3